

Title (en)

Stack of vertically displaced multi-mode single emitter laser diodes

Title (de)

Stapel aus vertikal versetzten Mehrmoden-Einzelemitter-Laserdioden

Title (fr)

Pile de diodes laser multimodes à émetteur unique verticalement décalées

Publication

EP 1788677 A1 20070523 (EN)

Application

EP 06023379 A 20061109

Priority

- US 73918505 P 20051122
- US 31306805 A 20051220
- US 37857006 A 20060317
- US 37866706 A 20060317
- US 37869606 A 20060317
- US 37869706 A 20060317
- US 38494006 A 20060320
- US 41758106 A 20060504
- US 49214006 A 20060724
- US 51762806 A 20060908

Abstract (en)

An optical source comprised of a stack of at least two laser diode subassemblies (1203-1207) is provided. Each laser diode subassembly includes a submount (601) and a multimode, single emitter laser diode (603). Each of the at least two laser diode subassemblies is mounted to a mounting member (1209). Means are included to vertically displace the output beams from the individual laser diode subassemblies to form an optical source output beam. In at least one embodiment, the mounting member (1209) performs the function of the vertically displacing means.

IPC 8 full level

H01S 5/40 (2006.01); **G02B 27/09** (2006.01); **H01S 5/022** (2006.01); **H01S 5/024** (2006.01)

CPC (source: EP US)

G02B 19/0009 (2013.01 - EP US); **G02B 19/0057** (2013.01 - EP US); **H01S 5/02326** (2021.01 - EP US); **H01S 5/02476** (2013.01 - EP US);
H01S 5/4043 (2013.01 - EP US); **H01L 2224/48091** (2013.01 - EP US); **H01S 5/005** (2013.01 - EP US); **H01S 5/02345** (2021.01 - EP US);
H01S 5/02423 (2013.01 - EP US); **H01S 5/4012** (2013.01 - EP US)

Citation (search report)

- [X] US 6240116 B1 20010529 - LANG ROBERT J [US], et al
- [X] US 2004114648 A1 20040617 - NAGANO KAZUHIKO [JP], et al
- [X] WO 9731284 A1 19970828 - FRAUNHOFER GES FORSCHUNG [DE], et al
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WO2009147036A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1788677 A1 20070523; US 2007116077 A1 20070524; US 2009103580 A1 20090423; WO 2007061515 A2 20070531;
WO 2007061515 A3 20071129

DOCDB simple family (application)

EP 06023379 A 20061109; US 2006038908 W 20061004; US 31672208 A 20081216; US 51762806 A 20060908